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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,662	01/18/2001	Ahmed Gheith	WHISPERWIRE-02R	6273

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GRAY, CARY, WARE & FREIDENRICH LLP
2000 University Avenue
E. Palo Alto, CA 94303-2248

EXAMINER
PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/764,662	GHEITH ET AL.
	Examiner	Art Unit	
	Hassan Phillips	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 October 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is

     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-56</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-56</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 January 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

         application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date <u>9/23/02</u>.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statements filed February 24, 2004, and

September 23, 2002 have been received and considered by the Examiner.

Specification

1. The lengthy specification has not been checked to the extent necessary to

determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the

specification.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 6-9, 12, 13, 15-19, 21-23, 26-29, 32, 33, 35-41, 44-47, 50, 51, 53-

56, are rejected under 35 U.S.C. 103(a) as being unpatentable over Diedrichsen et al.

(hereinafter Diedrichsen), U.S. Patent 6,671,716 in view of Poling, U.S. Patent

5,546,539.

3. In considering claims 1, 19, and 39, Diedrichsen teaches a method, system and instructions on a computer readable medium for operating a server computer 10 as part of a group of server computers to maintain session states for a plurality of users 5, the method, system and instructions comprising: Creating a first session state and locally storing the session state, (col. 2, lines 18-46, also see Fig. 1);

Although the disclosed method, system, and instructions of Diedrichsen show substantial features of the claimed invention, they fail to expressly show: The group of servers communicating with each other to store session states locally.

Nevertheless, it was well known in the art for groups of servers to communicate with each other in order to obtain copies of data and store data locally. This is exemplified in the teachings of Poling. More specifically, Poling teaches a method and system for propagating data over servers on a network comprising:

Transmitting a command to a group of server computers that, when executed by an executing server computer of the group of server computers, causes the executing server computer to locally store a first data file; receiving a command from another server computer of the group of server computers that corresponds to a second data file; and executing, by the server computer, the command to create the second data file and to locally store the second data file, (col. 4, lines 47-64).

Thus, given the teachings of Poling, it would have been obvious to one of ordinary skill in the art to modify the teachings of Diedrichsen in order to have a command transmitted to a group of server computers that, when executed by an

executing server computer of the group of server computers, causes the executing

server computer to locally store a first session state; receiving a command from another

server computer of the group of server computers that corresponds to a second session

state; and executing, by the server computer, the command to create the second

session state and to locally store the second session state. This would have provided

an efficient means for maintaining session states for users on a plurality of servers,

Poling, col. 3, lines 5-21. This also would have further enhanced the teachings of

Diedrichsen by allowing a user to resume an interrupted session from a different server,

as well as a different client, Diedrichsen, col. 3, lines 24-29.

4. In considering claims 2, 22, and 40, the teachings of Poling provide a means

for receiving a request for a third session state from a locally coupled process;

determining that the third session state is not locally stored; and requesting the third

session state from at least one other server computer. See col. 4, lines 47-64. One of

ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the

reasons stated in consideration of claims 1, 19, and 39.

5. In considering claims 3, 23, and 41, the teachings of Poling provide a means

for identifying a primary owner and a secondary owner of the third session state; and

transmitting a request for the third session state to the primary owner and the secondary

owner of the session state. See col. 4, lines 47-64. One of ordinary skill in the art

would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

6. In considering claims 6, 9, 26, 29, 44, and 47, the teachings of Poling provide a means for deleting the local copy of the first session state; and creating a new copy of the first session state with modification included therein. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

7. In considering claims 7, 27, and 45, the teachings of Poling provide a means for the local copy to be stored in dynamic memory of the server computer. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

8. In considering claims 8, 28, and 46, the teachings of Poling provide a means for the local copy to be stored in static memory of the server computer. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

9. In considering claims 12, 32, and 50, the teachings of Poling provide a means for receiving a request for a requested session state from a requesting server computer of the group of server computers; accessing a local copy of the requested session state;

and transmitting a copy of the requested session state to the requesting server

computer. See col. 4, lines 47-64. One of ordinary skill in the art would combine the

teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1,

19, and 39.

10. In considering claims 13, 33, and 51, the teachings of Poling provide a means

for the request to be sent to the primary owner and secondary owner of the requested

session state; and the server computer is the primary owner or secondary owner of the

requested session state. See col. 4, lines 47-64. One of ordinary skill in the art would

combine the teachings of Diedrichsen with Poling for the reasons stated in

consideration of claims 1, 19, and 39.

11. In considering claims 15, 35, and 53, the teachings of Poling provide a means

for identifying at least one other server computer of the group of server computers. See

col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of

Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

12. In considering claims 16, 36, and 54, the teachings of Poling provide a means

for identifying a secondary owner of the other server computer of the group of server

computers. See col. 4, lines 47-64. One of ordinary skill in the art would combine the

teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1,

19, and 39.

13. In considering claims 17, 37, and 55, the teachings of Poling provide a means for publishing a plurality of locally stored session states to other server computers of the group of server computers. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

14. In considering claims 18, 38, and 56, the teachings of Poling provide a means for coordinating the session states it publishes with session states published by other server computers of the group of server computers. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claims 1, 19, and 39.

15. In considering claim 21, the teachings of Poling provide a means for a subscriber thread to determine a secondary owner of the group of server computers; and the subscriber thread notifying a command publisher thread of the identity of the secondary owner. See col. 4, lines 47-64. One of ordinary skill in the art would combine the teachings of Diedrichsen with Poling for the reasons stated in consideration of claim 19.

16. Claims 4, 5, 10, 11, 14, 20, 24, 25, 30, 31, 34, 42, 43, 48, 49, 52 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Diedrichsen in view of Poling, and

further in view of Olson et al. (hereinafter Olson), U.S. Patent 5,987,376.

17. In considering claims 4, 24, and 42, although the disclosed method, system,

and instructions of Diedrichsen and Poling show substantial features of the claimed

invention, they fail to expressly show: Broadcasting the request to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for

maintaining state data, and communicating state data amongst client systems over a

network comprising: A client broadcasting request messages to other clients on a

network, (col. 7, lines 8-10).

Thus, given the teachings of Olson, it would have been obvious to one of

ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to

broadcast to all other server computers of the group of server computers a request for

the third session state. This would have enhanced the teachings of Diedrichsen and

Polling, by allowing the requestor to choose from a plurality of responses containing the

third session state, Olson, col. 7, lines 10-12.

18. In considering claims 5, 25, and 43, although the disclosed method, system,

and instructions of Diedrichsen and Poling show substantial features of the claimed

invention, they fail to expressly show: Broadcasting commands to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for maintaining state data, and communicating state data amongst client systems over a network comprising: Broadcasting commands to other clients on a network, (col. 11, lines 48-54).

Thus, given the teachings of Olson, it would have been obvious to one of ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to broadcast a command to other server computers of the group of server computers that, when executed by an executing server computer, causes the executing server computer to locally modify the first session state. This would have synchronized the session state between executing servers in the group of server computers, thereby, ensuring that executing server computers always have the same session state, Olson, col. 13, lines 24-38.

19. In considering claims 10, 30, and 48, although the disclosed method, system, and instructions of Diedrichsen and Poling show substantial features of the claimed invention, they fail to expressly show: Broadcasting commands to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for maintaining state data, and communicating state data amongst client systems over a network comprising: Broadcasting commands to other clients on a network, (col. 11, lines 48-54).

Thus, given the teachings of Olson, it would have been obvious to one of ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to

broadcast a command to other server computers of the group of server computers that,

when executed by an executing server computer, causes the executing server computer

to locally delete the first session state. This would have synchronized the session state

between executing servers in the group of server computers, thereby, ensuring that

executing server computers always have the same session state, Olson, col. 13, lines

24-38.

20. In considering claims 11, 31, and 49, although the disclosed method, system,

and instructions of Diedrichsen and Poling show substantial features of the claimed

invention, they fail to expressly show: Broadcasting commands to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for

maintaining state data, and communicating state data amongst client systems over a

network comprising: Broadcasting commands to other clients on a network, (col. 11,

lines 48-54).

Thus, given the teachings of Olson, it would have been obvious to one of

ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to

broadcast a command to other server computers of the group of server computers that,

when executed by an executing server computer, causes the executing server computer

to locally renew the first session state. This would have synchronized the session state

between executing servers in the group of server computers, thereby, ensuring that

executing server computers always have the same session state, Olson, col. 13, lines

24-38.

21. In considering claims 14, 34, and 52, although the disclosed method, system, and instructions of Diedrichsen and Poling show substantial features of the claimed invention, they fail to expressly show: Broadcasting the request to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for maintaining state data, and communicating state data amongst client systems over a network comprising: A client broadcasting request messages to other clients on a network, (col. 7, lines 8-10).

Thus, given the teachings of Olson, it would have been obvious to one of ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to broadcast to all other server computers of the group of server computers. This would have enhanced the teachings of Diedrichsen and Polling, by allowing the requestor to choose from a plurality of responses containing the session state, Olson, col. 7, lines 10-12.

22. In considering claim 20, although the disclosed method, system, and instructions of Diedrichsen and Poling show substantial features of the claimed invention, they fail to expressly show: Broadcasting requests to other servers.

Nevertheless, in a similar field of endeavor, Olson teaches a method for maintaining state data, and communicating state data amongst client systems over a network comprising: A client broadcasting request messages to other clients on a network, (col. 7, lines 8-10).

Thus, given the teachings of Olson, it would have been obvious to one of ordinary skill in the art to modify the teachings of Diedrichsen and Poling in order to broadcast a message to a group of server computers on the network to determine whether the server computer is the only member of the group of server computers. This would have enhanced the teachings of Diedrichsen and Poling, by allowing the server to determine whether communication with other servers is necessary, Olson, col. 7, lines 10-12.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Al-Ghosein et al., U.S. Patent 6,473,791 discloses a load balancing system in which policy objects communicate with each other over a network to maintain state information.

Endo, U.S. Patent 6,799,222 discloses a method for transferring process and status information to computers in a network using a multicast.

Choquier et al., U.S. Patent 5,951,694 discloses a method for transferring an active service from one server to another without interruption of the service.

Hopmann et al., U.S. Patent 6,578,054 discloses a method for synchronizing multiple copies of data in a network environment that includes servers and clients.

Shaheen et al., U.S. Patent 5,434,994 discloses a system and method for maintaining updated replicas of data between servers on a network.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
11/18/04

ZARNI MAUNG
PRIMARY EXAMINER